Radon Fact Sheet

Radon is a colorless, odorless, tasteless, and chemically inert radioactive gas. It is formed by the natural radioactive decay of uranium in rock, soil, and water. Naturally existing, low levels of uranium occur widely in Earth's crust. It can be found in all 50 states. Unless you test for it, there is no way of telling how much is present.

In 2005, the U.S. Surgeon General warned the American public about the risks of breathing indoor radon by issuing a national health advisory. The advisory is meant to urge Americans to prevent this silent radioactive gas from seeping into their homes and building up to dangerous levels.

“Indoor radon is the second-leading cause of lung cancer in the United States and breathing it over prolonged periods can present a significant health risk to families all over the county. It’s important to know that this threat is completely preventable. Radon can be detected with a simple test and fixed through well-established venting techniques.”

Radon is an invisible, odorless and tasteless gas, with no immediate health symptoms, that comes from the breakdown of uranium inside the earth. Simple test kits can reveal the amount of radon in any building. Those structures with high levels can be fixed with simple and affordable venting techniques. According to U.S. Environmental Protection Agency (EPA) estimates, one in every 15 homes nationwide has a high radon level at or above the recommended radon action level of 4 picoCuries (pCi/L) per liter of air.

Radon gas in the indoor air of America’s homes poses a serious health risk. More than 20,000 Americans die of radon-related lung cancer every year. Millions of homes have an elevated radon level. If you also smoke, your risk of lung cancer is much higher. Test your home for radon every two years, and retest any time you move, make structural changes to your home, or occupy a previously unused level of a house. If you have a radon level of 4 pCi/L or more, take steps to remedy the problem as soon as possible.

“Americans need to know about the risks of indoor radon and have the information and tools they need to take action. That’s why EPA is actively promoting the Surgeon General's advice urging all Americans to get their homes tested for radon. If families do find elevated levels in their homes, they can take inexpensive steps that will reduce exposure to this risk,” said Jeffrey R. Holmstead, Assistant Administrator, Office of Air and Radiation, U.S. EPA.

Anyone can use a “do-it-yourself” test kit to check their home or building. These one-use kits are simple to use and are available for free. In Missouri, go to http://www.dhss.mo.gov/Radon/FreeTestKit_Registration.html and in Illinois, go to http://www.iema.illinois.gov/radon/RadonTestKit.asp

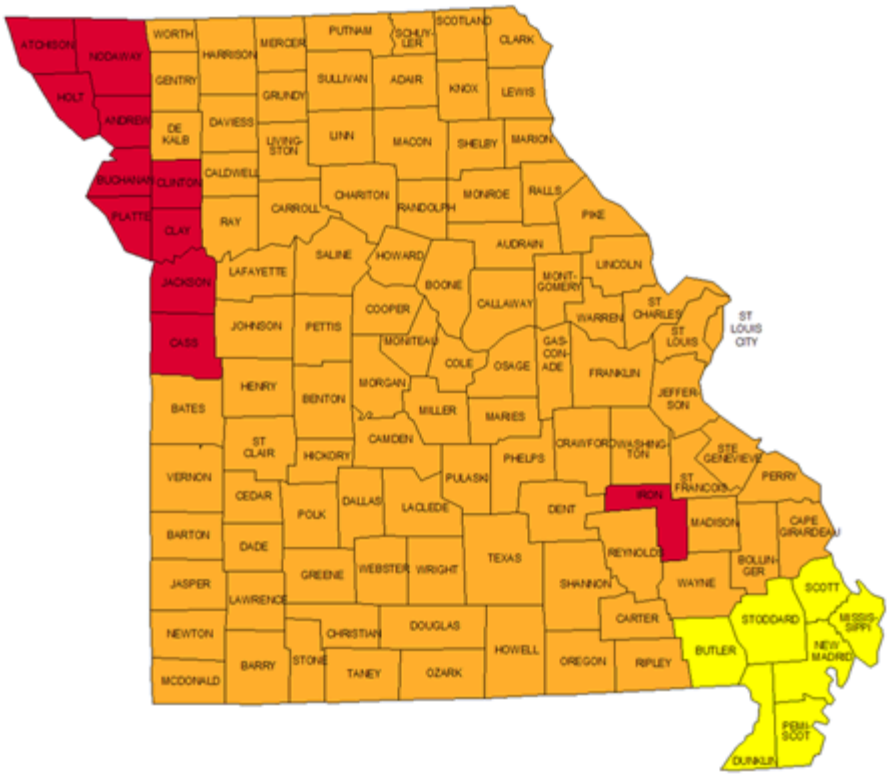
After being exposed to the building air for a specified time period, the kits must be returned to an analytic laboratory. Radon test kits are also available in hardware stores and other retail outlets.

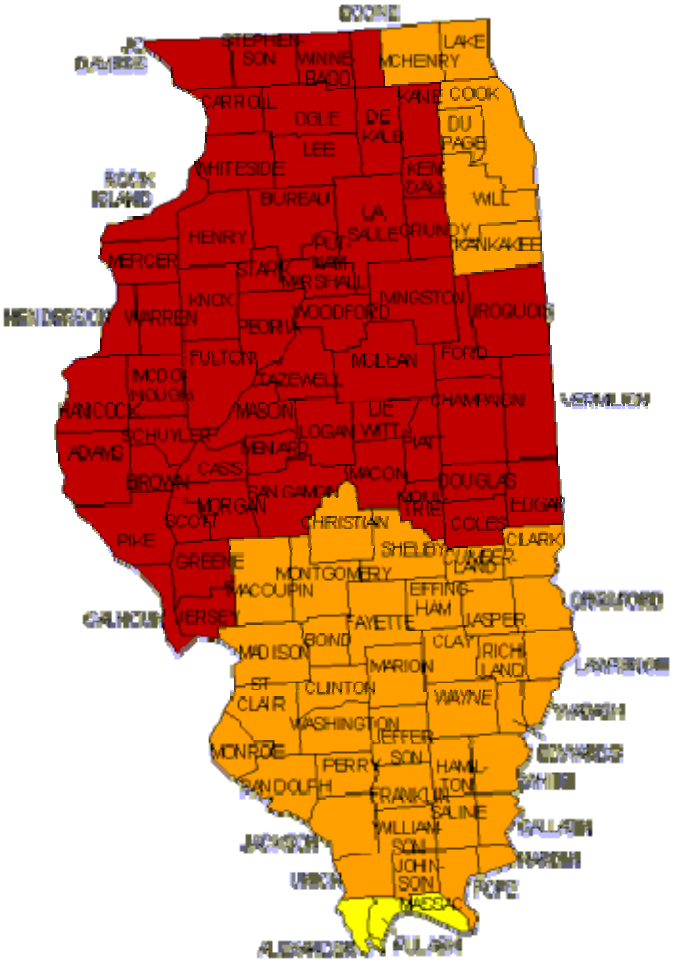
The EPA recommends that testing be done in the lowest level of the home suitable for occupancy. This typically represents an area where greatest radon level may occur. Ideally, the test should be conducted in a regularly used room on that level, such as a living room, playroom, den, or bedroom. Avoid testing in a kitchen, bathroom, laundry room, or hallway. High humidity and drafty conditions can bias results from some test devices. Do not disturb the devices while they are sampling. Doing so may alter their results, so they should be placed out-of-the-way.

The following maps illustrate the potential for radon in MO and IL:

Sections 307 and 309 of the Indoor Radon Abatement Act of 1988 (IRAA) directed EPA to list and identify areas of the U.S. with the potential for elevated indoor radon levels. EPA's Map of Radon Zones assigns each of the 3,141 counties in the U.S. to one of three zones based on radon potential:

	Zone 1 counties have a predicted average indoor radon screening level greater than 4 pCi/L (pico curies per liter) (red zones)	Highest Potential
	Zone 2 counties have a predicted average indoor radon screening level between 2 and 4 pCi/L (orange zones)	Moderate Potential
	Zone 3 counties have a predicted average indoor radon screening level less than 2 pCi/L (yellow zones)	Low Potential





For more information go to the EPA's web site:

http://www.epa.gov/radon/nram/index.html